

000041

## FACSIMILE COVERSHEET

**ENTACT**Leading the Nation in Customer Care

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Wood Dale, Illinois 60191  
Phone: 630.616.2100  
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EPA Region 5 Records Ctr.



200288

## Recipient Information

## Sender Information

<b>TO:</b> Ababi Harris	<b>SENT BY:</b> Shane Banks
<b>COMPANY:</b> US EPA Region V	<b>ENTACT:</b> (630) 616-2100
<b>FAX #:</b> (312) 886-4071	<b>DATE:</b> 12/16/07
<b># OF PAGES INCLUDING THIS SHEET:</b> 12	

**COMMENTS:**

The following is analytical for your records of the breachful source and the 3 verification samples pulled from the treated stockpiled soil. Call if you have any questions.

Shane Banks

IF FAX IS NOT RECEIVED IN ITS ENTIRETY, PLEASE NOTIFY ENTACT AT THE ABOVE TELEPHONE NUMBER. THANK YOU.



Ross Analytical Services, Inc.  
16433 Foltz Industrial Parkway • Strongsville, Ohio 44136  
(216) 572-3200 • Fax (216) 572-7620 • 1-800-325-7737

CERTIFICATE OF ANALYSIS

Client:

ENTACT  
1630 Wood Dale Road  
Wood Dale, IL 60191

Attn: Shane Banks

Work Order #: 97-11-132  
Client Code: ENTACT  
Report Date: 11/26/97  
Work ID: Waste Character, TPH, Pests.  
Date Received: 11/19/97

Purchase Order: C176

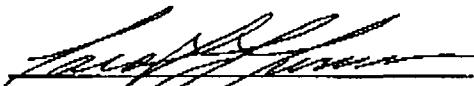
SAMPLE IDENTIFICATION

Lab Number	Sample Description
01	BF-005

Lab Number	Sample Description
02	BF-006

Enclosed are the analytical results for the samples listed above. Analyses were performed by the methods referenced in the Test Methodologies section, while any special circumstances are described in the Report Comments section. Unless otherwise noted, sample results are not moisture-corrected. Most analytes are reported relative to an Estimated Quantitation Limit (EQL), which is the lowest concentration that can be reliably measured under routine laboratory conditions. Questions or comments concerning the enclosed results should be directed to your Client Services Representative.

Analysis for mercury was done at American Analytical Labs  
Their results are included

  
Certificate approved by  
Carol L. Turner

000002A

## Ross Analytical Services, Inc

## DATA QUALIFIER FLAGS FOR ORGANIC ANALYSES

Some or all of the organics results for this Work Order are reported using the U.S. EPA's Contract Laboratory Program (CLP) forms and/or data qualifiers. Analyses may have been performed according to CLP protocol or by SW-846 methodologies. The qualifier flags most commonly used on the report forms are described below.

- U - The compound was analyzed for but not detected. The value reported is either the Contract Required Quantitation Limit (CRQL) for analyses by CLP protocol, or the Estimated Quantitation Limit (EQL) for analyses by SW-846 methodologies.
- J - The result reported is estimated, most commonly because the compound was detected, but at a concentration below the CRQL or EQL.
- P - The percent difference between the results determined from the primary and secondary GC columns was greater than 25%. The value reported is the lower of the two results.
- B - The compound was also detected in the blank associated with the sample.
- E - The concentration exceeded the upper level of the calibration range of the instrument. A valid result for the compound in question must be obtained from a diluted analysis, if possible.
- D - The result was quantified from a dilution of the original sample.

0000028

Work Order # 97-11-132

Ross Analytical Services, Inc

Reported: 11/26/97

TEST METHODOLOGIES.

pH in solids and non-aqueous liquids was determined electrometrically following slurrying with water as in EPA Method 9045C.

Organochlorine pesticides and PCB's were determined using gas chromatography with electron capture detection as in EPA Method 8081.

Metals were determined in solid and non-aqueous liquid samples by digestion with nitric acid, hydrogen peroxide, and hydrochloric acid as in EPA Method 3050A, followed by Inductively Coupled Plasma Emission Spectroscopy as in EPA Method 6010A, unless noted otherwise.

Total petroleum hydrocarbons were determined by infrared spectroscopy following extraction with Freon-113 as in EPA Method 418.1. Solids were Soxhlet extracted as in EPA Method 9071.

Solid and semisolid samples extracted for organochlorine pesticides and PCB's in an ultrasonic extractor using methylene chloride and acetone as in EPA Method 3550A.

000002D

Work Order # 97-11-132

Ross Analytical Services, Inc

Reported: 12/10/97

Sample Description BF-006

Lab No. 02

Test Description TPH by EPA 418.1

Test Code HCIR

Date Run 11/21/97 Dilution Factor 1 Units mg/Kg

Compound Result EQL

Petroleum hydrocarbons 80 30

000003

Work Order # 97-11-132

Ross Analytical Services, Inc

Reported: 11/26/97

Sample Description: BF-005Lab No.: 01

<u>Analyte Description</u>	<u>Result</u>	<u>Units</u>	<u>EQL</u>
pH by EPA 9045C	7.39	Standard units	
Arsenic by ICP	17	mg/Kg	10
Barium by ICP	32.4	mg/Kg	0.38
Cadmium by ICP	1.42	mg/Kg	0.48
Chromium by ICP	10.7	mg/Kg	1.0
Lead by ICP	12.7	mg/Kg	4.8
Selenium by ICP	<EQL	mg/Kg	10
Silver by ICP	<EQL	mg/Kg	1.0

Sample Description: BF-006Lab No.: 02

<u>Analyte Description</u>	<u>Result</u>	<u>Units</u>	<u>EQL</u>
pH by EPA 9045C	7.27	Standard units	
Arsenic by ICP	15	mg/Kg	10
Barium by ICP	55.8	mg/Kg	0.39
Cadmium by ICP	0.74	mg/Kg	0.49
Chromium by ICP	14.0	mg/Kg	1.0
Lead by ICP	22.4	mg/Kg	4.9
Selenium by ICP	<EQL	mg/Kg	10
Silver by ICP	<EQL	mg/Kg	1.0

## ANALYTICAL RESULTS

000005

Client Sample ID.....: S BF-006

Data Type.....: SAMPLE

Lab Sample ID.....: 971113202C

Lab File Name.....: 1971121a20.d (1), m971121a20.d (2)

Concentration Level...: LOW

Method.....: L8080.m

Compound Sub-List.....: 8081

Date Extracted.....: 11/20/97

Date Analyzed.....: 11/22/97

Time Injected.....: 03:39

Dilution Factor.....: 1

Percent Moisture...: 0 % Undecanted

Surrogate Analytes		% Recovery	Flags	Recovery Limits	
CAS Number	Analyte			Lower - Upper	
877-09-8	Tetrachloro-m-xylene	92%		10 - 120	SURROGATE
2051-24-3	Decachlorobiphenyl	108%		10 - 140	SURROGATE
Target Analytes		Results (ug/Kg)	Flags	EQL	
CAS Number	Analyte				
11104-28-2	Aroclor-1221	< EQL		66.0	
319-84-6	alpha-BHC	< EQL		1.70	
12674-11-2	Aroclor-1016	< EQL		33.0	
11141-16-5	Aroclor-1232	< EQL		33.0	
58-89-9	gamma-BHC (Lindane)	< EQL		1.70	
319-85-7	beta-BHC	1.60	JP	1.70	
76-44-8	Heptachlor	< EQL		1.70	
319-86-8	delta-BHC	< EQL		1.70	
309-00-2	Aldrin	< EQL		1.70	
53469-21-9	Aroclor-1242	< EQL		33.0	
1024-57-3	Heptachlor epoxide	< EQL		1.70	
12672-29-6	Aroclor-1248	< EQL		33.0	
5103-74-2	gamma-Chlordane	< EQL		1.70	
5103-71-9	alpha-Chlordane	< EQL		1.70	
959-98-8	Endosulfan I	< EQL		1.70	
72-55-9	4,4'-DDE	1.20	JP	3.30	
60-57-1	Dieldrin	< EQL		3.30	
11097-69-1	Aroclor-1254	< EQL		33.0	
72-20-8	Endrin	< EQL		3.30	
72-54-8	4,4'-DDD	< EQL		3.30	
33213-65-9	Endosulfan II	< EQL		3.30	
50-29-3	4,4'-DDT	< EQL		3.30	
8001-35-2	Toxaphene	< EQL		66.0	
7421-93-4	Endrin aldehyde	< EQL		3.30	
1031-07-8	Endosulfan sulfate	< EQL		3.30	
11096-82-5	Aroclor-1260	< EQL		33.0	
72-43-5	Methoxychlor	< EQL		17.0	
53494-70-5	Endrin ketone	< EQL		3.30	

Mercury

Method: SW846 7471

<u>Sam</u>	<u>Sample Description</u>	<u>Result</u>	<u>Units</u>	<u>Detection</u> <u>Limit</u>	<u>Analyzed By</u>
04A	971113202/CBL2B Bin 1 (BF-006)	< 0.05	mg/Kg	0.05	11/25/97 JSC



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16433 Foltz Industrial Parkway - Strongsville, Ohio 44136  
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CERTIFICATE OF ANALYSIS

Client:

ENTACT

1630 Wood Dale Road  
Wood Dale, IL 60191

Attn: Shane Banks

Work Order #: 97-12-021

Client Code: ENTACT

Report Date: 12/11/97

Work ID: Soils for TCLP Lead

Date Received: 12/04/97

Purchase Order: C176

SAMPLE IDENTIFICATION

<u>Lab</u> <u>Number</u>	<u>Sample</u> <u>Description</u>
01	TS-01
03	TS-03
05	TS-05
07	TS-07

<u>Lab</u> <u>Number</u>	<u>Sample</u> <u>Description</u>
02	TS-02
04	TS-04
06	TS-06
08	TS-08

Enclosed are the analytical results for the samples listed above. Analyses were performed by the methods referenced in the Test Methodologies section, while any special circumstances are described in the Report Comments section. Unless otherwise noted, sample results are not moisture-corrected. Most analytes are reported relative to an Estimated Quantitation Limit (EQL), which is the lowest concentration that can be reliably measured under routine laboratory conditions. Questions or comments concerning the enclosed results should be directed to your Client Services Representative.

Certificate approved by  
Carol L. Turner

Work Order # 97-12-021

Ross Analytical Services, Inc

Reported: 12/10/97

TEST METHODOLOGIES

The bottle leaching step of TCLP (for metals and semivolatile organics) was performed by EPA Method 1311. Matrix spikes, if any, were added at the time of digestion or extraction for further analyses.

Metals were determined in aqueous samples and leachates by digestion with nitric and hydrochloric acids as in EPA Method 3010A, followed by Inductively Coupled Plasma Emission Spectroscopy as in EPA Method 6010A unless noted otherwise.

Work Order # 97-12-021

Ross Analytical Services, Inc

Reported: 12/10/97

Sample Description: TS-01Lab No.: 01

<u>Analyte Description</u>	<u>Result</u>	<u>Units</u>	<u>EQL</u>
TCLP fluid leaching	12/08/97	Date begun	
TCLP Lead by ICP	<EQL	mg/L	0.25

Sample Description: TS-02Lab No.: 02

<u>Analyte Description</u>	<u>Result</u>	<u>Units</u>	<u>EQL</u>
TCLP fluid leaching	12/08/97	Date begun	
TCLP Lead by ICP	<EQL	mg/L	0.25

Sample Description: TS-03Lab No.: 03

<u>Analyte Description</u>	<u>Result</u>	<u>Units</u>	<u>EQL</u>
TCLP fluid leaching	12/08/97	Date begun	
TCLP Lead by ICP	0.72	mg/L	0.25

Sample Description: TS-04Lab No.: 04

<u>Analyte Description</u>	<u>Result</u>	<u>Units</u>	<u>EQL</u>
TCLP fluid leaching	12/08/97	Date begun	
TCLP Lead by ICP	<EQL	mg/L	0.25

Sample Description: TS-05Lab No.: 05

<u>Analyte Description</u>	<u>Result</u>	<u>Units</u>	<u>EQL</u>
TCLP fluid leaching	12/08/97	Date begun	
TCLP Lead by ICP	<EQL	mg/L	0.25

Sample Description: TS-06Lab No.: 06

<u>Analyte Description</u>	<u>Result</u>	<u>Units</u>	<u>EQL</u>
TCLP fluid leaching	12/08/97	Date begun	
TCLP Lead by ICP	<EQL	mg/L	0.25

Work Order # 97-12-021

Ross Analytical Services, Inc

Reported: 12/10/97

Sample Description: TS-07Lab No.: 07Analyte DescriptionTCLP fluid leaching  
TCLP Lead by ICPResult12/08/97  
<EQLUnitsDate begun  
mg/LEQL

0.25

Sample Description: TS-08Lab No.: 08Analyte DescriptionTCLP fluid leaching  
TCLP Lead by ICPResult12/08/97  
<EQLUnitsDate begun  
mg/LEQL

0.25